forceps, and with this the operation ended. The second stage of the operation was carried out six weeks later. After elevating the oseto-plastic flap, the dura was opened by a H-shaped incision and the flaps turned upward and downward. The head of the patient was then brought over the edge of the table and the right frontal lobe of the brain was separated from the orbital roof, slowly and carefully, first with the finger and then with the Krause brain elevator. This gave a cleft, 5 cm. broad anteriorly, more narrow posteriorly. At a depth of about 7½ to 8 cm., the right optic nerve was visible. A copious escape of cerebrospinal fluid prevented further examination. Raising the head end of the table about 30 degrees stopped this. Just in front of the optic commissure could be seen a dark red tumor which was tongue-shaped. It was removed with a curette which went to the bottom of the sella turcica without difficulty. The bleeding was slight. The dural flaps were sutured, the osteoplastic flap placed in position and the skin sutured. The postoperative course was without disturbance and the eyes were not affected. Three weeks later the symptoms of acromegaly began to disappear. Bogojawlensky considers that the intracranial route through the anterior fossa is not only the best, but the only method by which one can be compleetly aseptic and remove everything from the sella turcica under the control of the eyes, without injuring the brain or the optic nerves. It is necessary to employ artificial light, best in the form of an electric lamp with a reflector on the brow. The best position of the patient is obtained by elevating the end of the table to an angle of 30 degrees, with the head strongly retroflexed.

Nerve Anesthesia in Kidney Operations and Thoracoplasty and in Operations on the Trunk in General.—KAPPIS (*Zentralbl. f. Chir.*, 1912, xxxix, 249) says that novocain-suprarenalin gives us a relatively safe and strong local anesthesia. It is an important advance, particularly when peripheral nerve trunks are injected. It has been employed in operations on the trigeminus region and the extremities. Nephrotomy, amputation of the breast, and thoracoplasty have been done with it. Kappis has used it for a pyelotomy, a nephrolithotomy, and a nephrectomy. The method is as follows: In order to inject the intervertebral nerve, the needle is introduced about 3½ cm. from the midline on a level with the lower border of a rib. The rib in this position is not palpable, but its position can be determined in the following manner. Even in stout individuals somewhere in the back, one of the lower ribs will almost always be palpable. The lower edge projects toward the median line. The needle is to be introduced at a point where the lower edge of the rib is 3½ cm. from the median line. The rib is reached at a depth of about 4 or 5 cm., about in the angle between the transverse process and the rib, which can occasionally be distinctly felt. Keeping as much as possible in this angle at the lower border of the rib, the needle is pushed forward and somewhat medially, and the fluid divided between the level of the rib and 1½ cm. deeper. When the injection has been made under one rib, the other points of injection are easily selected, since one simply keeps in the line 3½ cm. from the median line and goes about 3 cm. upward or downward, seeking in a similar manner the lower edge of the rib and making the injection. The transverse process of the lumbar vertebræ must always answer for the ribs, but they are further apart than the ribs. Ten cubic centimeters of a 1.5 per cent. novocain-suprarenalin solution is injected. The operation should begin in about a quarter of an hour after the injection. In his first two kidney operations, Kappis injected from the ninth dorsal to the second lumbar vertebra on the affected side. Since the stripping off of the peritoneum was not completely painless, in the next operation, he injected also the seventh and eighth dorsal, but without a better result. With a proper injection, the skin, soft tissues, and kidneys with a large portion of the ureter, will be completely painless, but not so with the stripping of the peritoneum. For this reason he has on one occasion given 15 drops and on another occasion 30 drops of ether. The method is an important advance in kidney operations, especially when the kidney not operated on is diseased. It permits the avoidance of a psotoperative nephritis from the narcosis in the remaining kidney after a nephrectomy.

The Technique of Local Anesthesia in Thoracoplasty.—SCHUMACHER (*Zentralbl. f. Chir.*, 1912, xxxix, 252) says that Sauerbruch employed the following method in 35 cases of extensive rib resections: Small doses of morphine or of pantopton were given one hour before the operation. A 0.5 per cent. novocain solution with the addition of suprarenalin was employed, the solution being made freshly for each operation. According to the extent of the operation, from 10 to 200 c.c. were necessary. The line of the intended incision was first injected subcutaneously. From this anesthetic line the deeper tissues, chiefly the nerves, were injected. The needle was directed from below and inward, upward, and outward against the rib lying over the point of injection in the region of the angle of the rib. When the needle scraped the bone, 1 to 2 c.c. were injected. Then feeling for the lower border of the rib, 5 to 8 c.c. were deposited. At the costal angle the intercostal nerve passes from the middle of the intercostal space upward to the lower border of the rib above. The intercostal veins are already in the groove under the rib above. The injection is made for each rib to be resected. The first intercostal nerve under the first rib is injected successfully in thin patients, but less so in stout patients. For the axillary incision a large injection needle is passed as far as possible posteriorly along the convex border of the rib with continuous injection. In 20 out of the 35 operations, in which 4 to 8 ribs were resected, no chloroform was necessary. In the others a few drops were necessary to induce a partial, light narcosis. No accidents, such as penetration of large vessels, the pleura or lungs, were observed.

Parathyroids and Their Surgical Relation to Goitre.—MAYO and McGRATH (*Annals of Surgery*, lv, 185) say that numerous hypotheses, erroneous deductions, and illogical conclusions have been drawn in connection with the action of the parathyroids, but that there no longer seems to be substantial grounds for doubting the etiological relationship between them and one disease, namely, tetany. Experimental tetany has been produced in animals by the removal of parathyroid tissue, and experimental tetany may be reckoned, in a certain sense, tetany following operation upon the human thyroid gland.